

**Abstract of the Disclosure**

A wireless user terminal (42) and system (40) implementing a mixed signal CODEC (100) including an improved sigma-delta ADC (18) which limits input signals into a switched capacitor configuration and avoids adding circuit overhead in the signal path is disclosed herein. This sigma-delta analog-to-digital converter (18), having an input signal and an output signal, includes a switch ( $sw_1$ ), a clipping circuit (20), and a known sigma-delta ADC (34). It solves the clipping signal problem by limiting the signal right at the input of the sigma-delta ADC (34). The clipping circuit (20) couples to the switch ( $sw_1$ ) and the sigma-delta ADC (34) for switching the voltage applied to the sigma-delta ADC between the input signal ( $v_{in}$ ) and at least one threshold voltage ( $V_n$  and  $V_p$ ).